

WHAT IS CLAIMED IS:

1. A method for communicating a clock signal over an optical link, comprising:

receiving a multimodulated optical information
5 signal comprising non-intensity modulation for a data
signal and intensity modulation for a clock signal;

recovering the clock signal based on the
intensity modulation of the multimodulated optical
information signal;

10 converting the non-intensity modulation for the
data signal to intensity modulation for the data signal;
and

recovering the data signal from the intensity
modulation for the data signal using the clock signal.

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2. The method of Claim 1, wherein the non-
intensity modulation comprises a phase modulation of a
carrier signal.

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3. The method of Claim 1, wherein the non-
intensity modulation comprises a frequency modulation of
a carrier signal.

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4. The method of Claim 1, wherein the data signal
is phase shift keyed in the multimodulated optical
information signal and the clock signal is intensity
shift keyed in the multimodulated optical information
signal.

5. A system for communicating a clock signal over an optical link, comprising:

means for receiving a multimodulated optical information signal comprising non-intensity modulation
5 for a data signal and intensity modulation for a clock signal;

means for recovering the clock signal based on the intensity modulation of the multimodulated optical information signal;

10 means for converting the non-intensity modulation for the data signal to intensity modulation for the data signal; and

means for recovering the data signal from the intensity modulation for the data signal using the clock
15 signal.

6. The method of Claim 5, wherein the non-intensity modulation comprises a phase modulation of a carrier signal.

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7. The method of Claim 5, wherein the non-intensity modulation comprises a frequency modulation of a carrier signal.

25 8. The method of Claim 5, wherein the data signal is phase shift keyed in the multimodulated optical information signal and the clock signal is intensity shift keyed in the multimodulated optical information signal.

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9. A optical receiver, comprising:

an interface for receiving a multimodulated optical
information signal comprising non-intensity modulation
for a data signal and intensity modulation for a clock
5 signal;

a clock recovery element operable to recover the
clock signal based on the intensity modulation of the
multimodulated optical information signal;

a data recovery element operable to recover the data
10 signal from the non-intensity modulation of the
multimodulated optical information signal based on the
clock signal.

10. The system of Claim 9, wherein the non-
15 intensity modulation comprises a phase modulation of a
carrier signal.

11. The system of Claim 9, wherein the non-
intensity modulation comprises a frequency modulation of
20 a carrier signal.

12. The system of Claim 9, wherein the data signal
is phase shift keyed in the multimodulated optical
information signal and the clock signal is intensity
25 shift keyed in the multimodulated optical information
signal.